# IDEAS FOR ACTION – HOW CAN WE BETTER PLAN?

The following checklist is expanded from recommendations contained in ABAG's report, ***Riding Out Future Quakes – Ideas for Action*** (Perkins and others, 1998). The recommendations focus on ways to keep providing transportation services following earthquakes, as well as how to plan around expected transportation interruptions. As such, they are useful in airport operations.

## Airport Checklist

### *Employees*

- ☐ work with employees to set up alternative routes from their homes to key facilities and offices in an emergency
- ☐ plan alternative shifts and/or crews since maintenance workers can be overworked
- ☐ cross-train employees to allow for some workers being unable to reach your facilities in a timely manner due to transportation disruptions
- ☐ make efforts to ensure safety to crews working on repairs, for they may be close to other damage

### *Operations*

- ☐ *general* - evaluate the extent to which general aviation and military airports could accommodate commercial aircraft in an emergency
- ☐ *roads* - work to keep open surface roads in and out of your facility routinely maintained by your agency
- ☐ *supplies* - ensure that you have stocked your operations center with food, water and sanitation systems to allow for disruptions
- ☐ *fuel* - connect fuel pumps at vehicle yards to a backup power system
- ☐ *fuel* - ensure adequate fuel supplies should restocking of fuel supplies be delayed due to transportation disruptions, breaks in fuel pipelines, or refinery source disruptions (including fuel for ground-based vehicles)
- ☐ *power* - provide, anchor and test back-up power equipment, such as batteries
- ☐ *power* - size fuel supply tanks for emergency generators; power outages may be longer than expected
- ☐ *communications* - provide, anchor and test back-up equipment, such as portable radios and relay towers
- ☐ *water* - install back-up supplies on-site and anchor tanks
- ☐ *equipment* – work to ensure that all equipment and non-structural items are appropriately anchored, particularly in control towers
- ☐ *pipelines* - design on-site utility lines to minimize risk of pipeline breaks
- ☐ *pipelines* - create and isolate shorter segments of pipelines to facilitate repairs by installing additional valves; maintain those pipelines and valves

### *Site Hazards*

Mitigate the exposure of your facilities to various earthquake hazards described in this plan, including:

- ☐ *liquefaction and/or differential settlement* – in particular, work to minimize the likelihood of closed runways due to pavement buckling by undertaking ground improvement mitigation as part of larger runway construction or reconstruction projects
- ☐ *violent shaking* – assess and mitigate structural deficiencies, particularly in older facilities designed and constructed using less stringent building codes

## *Emergency Plans*

Ensure that the emergency plan for your facility covers the four roles of that planning process in an earthquake disaster:

- ☐ to protect employee and public safety during an earthquake (such as by the use of duck-cover-hold emergency procedures);
- ☐ to provide for employee and public safety in the immediate aftermath of the earthquake (such as plans for the medical care, feeding and sheltering on site of airport employees and passengers);
- ☐ to ensure the most rapid return of the airport to a status where the airport can be used for the dispatch and delivery of emergency personnel and materials; and
- ☐ to ensure the most rapid return to full operational status by the airport.

***Existing airport emergency plans could be improved and expanded with more extensive coordination among the three Bay Area international airports, as well as with airport users, general aviation airports, military and federal airports, and airports outside the Bay Area.***

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